IN THE SPECIFICATION:

Please insert the following after the Title of the Invention:

--CROSS-REFERENCE TO RELATED APPLICATION

The present application is a continuation of International Application No. PCT/JP02/08091 which was filed on August 7, 2002.--

At page 4, paragraph 2, starting on line 17, please change to read as follows:

On the other hand, a diffraction-grating type sensor chip is constructed by laminating a transparent substrate, whose surface has an uneven form having projections and depressions (a grating), with a metal layer. Since the metal layer is layered over the uneven form, the surface of the metal layer also takes an uneven form, which uneven form on the surface of the metal layer functions as a diffraction grating. Using a high-order diffraction light, an evanescent wave is generated along the conductor surface. When the wave number and the angular frequency of the surface progressive wave agree with those of the surface plasmon wave of the metal surface, a resonance occurs and causes a decrease in the reflectance. It is thereby possible to detect the properties of the metal surface or the properties of substances in contact with the metal surface (refer to Japanese Patent Number 190313~~-~~95, Japanese Patent Number 2502222, and others).

At page 141, paragraph 3, starting on line 21, please change to read as follows:

When using the sensor chip ~~+~~201 for sample analysis, as shown in FIG. 16, binding substances 206, 207 are immobilized on the sensor surface 201a in advance. Then the sensor chip 201, on which the binding substances 206, 207 are immobilized, is set on an analysis apparatus 210 having the constitution as shown in FIG. 20 while analysis is carried out. The analysis apparatus 210 is constituted basically of a holder (holding means) 211 for holding the sensor chip 201, a light source (light irradiation means) 212, a light detector (light receiving means) 213, and an analysis unit 214.

At page 153, paragraph 1, starting on line 1, please change to read as follows:

The sensor chip 261 has the areas 251-254 on its surface, as described above, and the diffraction grating is formed over these areas so as to have different groove pitches between these areas. The areas 251-254 also have different surface

properties. Most of the differences of surface properties are minute differences due to manufacturing stage of the sensor chip, but they still have an influence on the intensity of the light reflected from the sensor chip despite their minuteness. Accordingly, the reflection lights from the areas 251-254 also differ.

At page 185, paragraph 2, starting on line 18, please change to read as follows:

Meanwhile, in the modification of the eleventh embodiment (refer to FIG. 19), the areas 251-254 are disposed discretely in such a manner that those groove orientations are uniform. On the contrary, it is also preferable to dispose the areas 251-53 as the sensor chip ~~1~~201" shown in FIG. 37, namely, in such a manner that the groove orientation of one or more of the areas 254 is different from those of the remaining areas 251-53, or in such a manner that the groove orientations of all of the areas 251-254 are different with each other. In this case, by light irradiating while varying a light irradiation diretion in accordance with the areas 251-254 such that the light enters perpendicular to the groove orientation of each area, it is possible to achieve the same operations and advantages as are achieved in the eleventh embodiment.

At page 205, paragraph 2, starting on line 8, please change to read as follows:

[Example ~~6~~9]

On the surface of a flat-shaped substrate of polycarbonate, there were provided diffraction gratings formed of projections and depressions. A depth of approximately 80 nm of gold was then evaporated onto the surface of the substrate, thus producing a sensor chip.

At page 209, paragraph 1, starting on line 2, please change to read as follows:

[Example ~~10~~7]

As in the case of Example ~~1~~6, using a sensor chip on which provided were 2.5-mm-wide areas where diffraction gratings with separate groove pitches (TP) of, 846 nm, 856 nm, 870 nm, and 876 nm, respectively, are formed, the intensity of reflected light was measured while irradiating a sample with light at a fixed incident angle. The measurement was performed with an SPR assessment device, FLEX CHIPS™ Kinetic Analysis System, and purified water and 10% ethanol aqueous solution were used as samples. The temperature of the samples was 30°C at the measurement; the wavelength of the incident light was 875 nm; and the incident angle of the incident light was 20.8502°.